DOCUMENT RESUME

ED 197 247 CG 014 894

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TITLE Decreasing Methadone Dose Via Anxiety Reduction: A Treatment Manual.
SPONS AGENCY National Inst. on Drug Abuse (DHEW/PHS), Rockville, Md.; Public Health Service (DHEW), Rockville, Md.
PUB DATE [79]
GRANT PHS-1-K02-DA00065; PHS-1-R-01-DA01910
NOTE 26p.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Anxiety; Clinics; *Drug Rehabilitation; Expectation; Information Dissemination; *Patients; Program Descriptions; Program Effectiveness; *Rehabilitation Programs; *Relaxation Training; *Therapeutic Environment; Therapy
IDENTIFIERS *Methadone

ABSTRACT

This manual describes a Relaxation-Information Presentation program based on the clinical observation that anxiety is a serious barrier to detoxification for many methadone clients, and on experimental evidence indicating that expectations may play a greater role in the discomfort experienced during detoxification than the actual methadone dose. The three elements of the treatment program are described: (1) redefinition of withdrawal symptoms; (2) relaxation training; and (3) use of anxiety as a cue to relax. Preliminary data obtained in a multi-site clinical trial evaluating the program are presented. Considerations about recruitment, attrition, and sequencing of treatment are discussed, and a session by session description of the treatment program is provided. While the treatment program described is targeted at methadone maintenance clients, this approach may be of value in treating outpatient heroin detoxification and drug patients who are experiencing anxiety related to factors other than detoxification. (Author)

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DECREASING METHADONE DOSE VIA ANXIETY REDUCTION: A TREATMENT MANUAL

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The work reported in this article was funded by USPHS Grant Number 1-R01-DA01910 and by ADAMHA Research Scientist Development Award 1-K02-DA00065.

Decreasing Methadone Dose Via Anxiety Reduction: A Treatment Manual

The purpose of this manual is to describe a treatment program (Relaxation/Information) designed for clients who are detoxifying from methadone maintenance or who are planning to detoxify; this program includes provision of information about redefinition of withdrawal symptoms, intensive relaxation training, and practice in using anxiety as a cue to relax.

The Relaxation/Information program is based on the hypothesis that detoxifying from methadone is greatly complicated by the anxiety occurring during detoxification. This anxiety is viewed primarily as the result of misinterpretation of withdrawal symptoms (e.g. assuming severe, unbearable symptoms are sure to follow mild ones), as well as of fears about efficacy in performance in "non-addict" roles. There is a good deal of clinical evidence to support this hypothesis (e.g., Muskelly, 1972; Riordan and Rapkin, 1972; Kreman and Bayer, 1973) as well as at least one controlled study (Senay, Dorus, Goldberg and Thornton, 1976) which indicated that expectations and anxiety are central in detoxification from methadone maintenance.

The three elements of the treatment program, and their relationship to detoxifying from methadone maintenance are:

Redefining withdrawal "symptoms". Subjects are encouraged to think about increases in aches and pains, and in emotions experienced, as normal but appearing abnormal because of the subject's previously narcotized state.

During treatment, the mechanisms by which anxiety exacerbates symptoms is discussed, as is basic information on health care and nutrition and the relationship of these two factors to anxiety. (For example, many subjects report no awareness of the relationship of caffeine or nicotine intake to feelings of sleeplessness, jitteriness and shakiness, all of which may mimic the symptoms of withdrawal.)

Emphasis is placed on the ultimate controllability of symptoms, particularly via anxiety reduction techniques, and subjects are taught that mild symptoms are not necessarily precursors to severe ones.

Intensive Relaxation Training. Subjects are taught two forms of relaxation. In the first, "cognitive" relaxation, subjects sit in a relaxed posture, breathe deeply and slowly, and repeat to themselves the word "calm" with each exhalation. The subject focuses attention on this word; if distracting thoughts occur, the subject returns attention to this central stimulus. The importance of a passive attitude is emphasized. This sequence is repeated for

up to 15-20 minutes. The procedure has been found to produce a deeply relaxed state, the effects of which extend beyond the period of relaxation itself (Beary and Benson, 1974).

Progressive muscle relaxation (Jacobsen, 1938) is also included, primarily to increase the subject's awareness of the differences between tense and relaxed states. Subjects tense and relax muscle groups throughout the body and concentrate on awareness of differences between the two states.

Anxiety as a Cue to Relax. In an adaptation of treatment techniques developed by Suinn and Richardson (1971), subjects are taught to recognize subjective feelings and physiological changes which signal anxiety, and to reduce anxiety by reinstating the relaxation response learned previously. Subjects practice this sequence during meetings; they are also instructed to practice the response when real-life situations elicit anxiety. This phase of the treatment has two parts. First, the group and leaders discuss subjective cues associated with anxiety. Details of real life situations and scenes that cause anxiety symptoms are discussed. Second, subjects imagine anxiety-producing scenes in order to elicit the anxiety response and then follow this response with relaxation.

Clinical programs including elements similar to those described have reported generally positive results (Goldberg, Greenwood and Taintor, 1976; Hall, 1979; Lamontgue, Hand, Annable and Gagnon, 1975).

This treatment program is currently being evaluated in a controlled, random assignment trial, supported by the National Institute on Drug Abuse (1DA 1RO-01910), in seven methadone maintenance clinics in the San Francisco Bay Area.

Forty-six subjects (18 males and 28 females), have been randomly assigned to either treatment or control conditions. All subjects completed an initial test battery and met the following criteria: not psychotic nor anticipating jail time within one year, continuous enrollment in treatment for at least six months prior to study start, no illicit drug use three months prior to study start, stated wish to detoxify within one year, and counselor's permission to participate in the study. Subjects are stratified on the basis of sex, dose at study start, and six month baseline urine history, and randomly assigned from stratified blocks to experimental (n=23) and control (n=23) conditions.

During treatment, control subjects continue to have access to paraprofessional counselors and vocational rehabilitation personnel. In addition, in the Relaxation plus Information condition, subjects receive a treatment program which includes redefinition of withdrawal symptoms, relaxation training, and in the use of anxiety as a signal to relax. Treatment groups are led by one of two masters' level therapists, so that therapist effects can be assessed. The intensive phase of treatment is five weeks; subjects meet at least once during the initial

week and three times per week for the following four weeks. Meetings are then held biweekly for the following eight weeks. Meetings during weeks 5-12 are follow-up meetings. Approximately ninety minutes are allowed for each meeting.

At weeks 0, 5, 12, 24, and 52, an assessment battery is completed. The battery consists of 15 item Tapering Concerns Inventory, the Profile of Mood States (POMS; McNair et al., 1971), the Weekly Research Interview (Senay et al., 1976), and an alcohol and drug use questionnaire (Havassy, unpublished). Illicit drug use and methadone dose data are collected throughout the 52 week period; subjects' urine is tested for benzodiazapines at weeks 5, 12, 24, and 52; if subjects are no longer in treatment at assessment, their urine is also tested for morphine, methadone, amphetamines and barbiturates.

Of the 46 subjects recruited to date, 68% completed treatment (i.e. attended approximately 66% of the treatment sessions). Sex interacts significantly with treatment condition with respect to attrition: 2 females (16%) left treatment and 7 males (78%; p=.0014). In the analyses that follow, all subjects entered the study for whom posttreatment and 12 week data are available are included regardless of status with respect to treatment completion; (n=36); p levels are two-tailed. At treatment termination (week 5), differences between experimental and control conditions are marginally significant in percent methadone dose reduction (p=.060, experimental $\bar{X}$=-5.645, control $\bar{X}$=+4.623.) Significant main effects were found as a function of stratifying variables, but no treatment condition by main effects interactions were noted: Sex differences in percent dose reduction were significant (p=.000, female $\bar{X}$=-8.518, male $\bar{X}$=+4.130), as were differences between subjects at high ($\geq$50 mg.) or low (<50 mg. doses of methadone (p=.0143 $\geq$50mg. $\bar{X}$=.454; <50 mg.=-7.152). Percent drug-free urines during baseline (100% vs. <100%) was not related to percent dose reduction.

At three months posttreatment, experimental and control condition continued to differ at marginally significant levels (p=.10, experimental $\bar{X}$=-7.000, control $\bar{X}$=-4.001). Results with respect to stratifying variables also paralleled those found at week 5. No significant treatment condition by stratifying variable interactions were noted, but significant effects were noted for sex, (p=.010, female $\bar{X}$=-9.800, male $\bar{X}$=-1.151), and for dose at study start (p=.021 $\geq$50 mg.=+1.440, <50 mg.=-3.372), while percent drug free urines again did not reach significance.

At posttreatment and three month follow-up experimental and control conditions did not differ on mean percent drug-free urines (p=.80). Analyses for POMS anxiety scores, POMS Total Mood Disturbance Scores, Tapering Concerns Inventory Scores, withdrawal symptomatology, or self-reported drug and alcohol use indicated a complex pattern of relationships, both within these measures, and with dose. Interpretation of these results

awaits further analyses. However, our very preliminary analyses indicate anxiety and mood disturbance are related to dose reduction in the control but not in the experimental condition.

It is our hope that this manual will serve two purposes. First, although evaluation of the usefulness of the results of the treatment program awaits final analyses, we, like others in the drug treatment field, are painfully aware of the sparsity of acceptable psychological treatment methods for use with drug treatment clients. This manual is designed to describe a method that is acceptable, especially to female clients, and may well be of therapeutic value. Second, this manual serves as our working protocol, and therefore will eventually allow replications. If any researchers embark on such a task, we would appreciate hearing from them.

Recruitment

In initially presenting the group to potential subjects, it is important to assure them that there will be no pressure for them to detoxify. Rather, potential subjects are told that they will learn skills which will help them to detoxify at a pace they choose. Many methadone clients have unsuccessfully attempted to detoxify, and find pressure to detoxify extremely threatening. It is important to emphasize that the subject has the ultimate control over how or even if, he or she will detoxify. Also, subjects are told that these groups are not "therapy groups", but are designed for subjects who wish to learn skills and information related to detoxifying. (Many potential subjects have had aversive experiences with therapy groups in the past and identification of the groups as such discourages participation.) Describing relaxation as "feeling good", "calm", and "peaceful", "not uptight" is often necessary, as many methadone clients are unclear about the meaning of "relaxation".

Suitability for Treatment

The following are our current research criteria: 1) continuous treatment in methadone maintenance of six months or more, 2) no morphine positive urines for three months prior to study start, 3) expressed interest in detoxifying from methadone within one year. Psychotic clients or those anticipating jail time within one year are excluded from the group, the latter to facilitate follow-up data collection.

Attrition

The leader concentrates on preventing attrition before it occurs by running the group in an informal, supportive manner. Group members are encouraged to share their experiences in a non-threatening non-judgemental atmosphere. In addition to being generally positive and encouraging, the leader concentrates on focusing on each member of the group in turn at each meeting. If a subject states that he or she

is thinking of terminating, the leader is supportive but encourages the subject to continue. The subject is also reminded that by "coming through" with meeting attendance, he or she will learn techniques conducive to dose reduction to be called into play when other circumstances in his or her life make dose reduction feasible. Also, it is pointed out that continued attendance will benefit subjects by providing them with an armamentarium of relaxation and anxiety reduction skills which are beneficial in and of themselves. If a subject fails to appear at a group meeting without notice, the leader contacts him or her as soon as possible after the meeting, and encourages him or her to return, and, if at all possible, schedules a make-up session. This procedure is followed for up to and including three consecutive misses. After that point, the client is considered to have dropped out. If possible, arrangements are made to discuss with the subject his or her reasons for attriting.

To enhance uniformity across time and therapists, specific time allotments are provided for each activity. Amount of time allotted for various segments of the treatment procedure may seem excessive. However, our subjects generally have some difficulty in remaining focused on the subject at hand, at least initially, and it takes time to teach them to focus on questions and issues of concern.

Sequencing of Treatment

The treatment sequence begins with an introductory week in which subjects attend at least one session where relaxation training is taught. During the remainder of the five week treatment period, three meetings per week are held. These meetings include both relaxation training and more formal material about detoxifying and its relation to relaxation. While intuitively it seems more sensible to present information about detoxifying early in treatment, we find that some early attrition can be prevented by providing subjects with a positive relaxation experience initially. Our program provides a great deal of repetition, because we find that this is needed with this population, who often have limited attention spans, or show relatively sporadic attendance.

At the end of the intensive treatment period, a series of three booster sessions are held bi-weekly to encourage the continued use of skills learned.

Treatment Procedures

Week 1 Meetings 1 and 2: Introduction

Meetings 1 and 2 are virtually identical and serve to introduce subjects to the details of this treatment protocol, as well as to introduce them to relaxation. No subjects are accepted into the

group following Meeting 2.

Introduction and statement of purpose (15 minutes). In this initial meeting it is important to establish what the workshop is about with a brief, simple description, and of great importance, to give the client a favorable impression of the group to encourage future attendance. The goal of this meeting is to provide a very positive experience in deep relaxation. The leader sets the tone for an informal group atmosphere, welcoming members by name as they arrive and introducing members to one another. As subjects' anxiety levels may be particularly high as they enter this new situation, the leader is reassuring and supportive. The leader attempts to answer any questions. The leader says the following (in his/her own words):

"Today we're going to go through the relaxation exercise. After this experience, you'll have a better idea of what we'll actually be teaching you in the group and how you can apply it to your life. As you learn these relaxation skills, you'll be better able to recognize anxiety and then use the relaxation techniques to keep the anxiety under control. You'll find that you cannot be both anxious and relaxed at the same time. So once you can relax yourself, you'll have more control over the tension and anxiety you experience. We will discuss information about detoxification and how relaxation training may be useful for you in that and other anxiety-arousing situations. This group is not designed to pressure you to detoxify in any way. We do want to teach you relaxation skills and give you information about detoxification and then it's up to you what you want to do with it. Any questions or comments?

Now, let's go to the relaxation exercise."

Introduction to Progressive Muscle Relaxation (45 minutes). At this point, progressive muscle relaxation is introduced. Exercise mats are provided so subjects can lie down comfortably and experience relaxation of the whole body. The purposes of this initial exercise are 1) to teach subjects to recognize the difference between tense and relaxed states, 2) for subjects to begin to recognize what their muscles are doing when they experience 'tension', 3) for subjects to experience the state of relaxation. Deep relaxation may not be achieved in one session; however, most subjects have experienced very little non-chemical relaxation in the past, and find even mild muscular relaxation very rewarding. The progressive muscle relaxation procedure used is an adaptation of that of Rimm and Masters (1974). The leader helps place clients on mats, instructing clients to get as comfortable as possible lying down, not crossing legs, and removing shoes or belts if needed.

The leader begins with a brief explanation of the rationale of deep muscle relaxation.

"Today you're going to experience the state of deep relaxation. We'll be doing this through alternately tensing and then relaxing each muscle group, systematically going through your whole body. We'll be doing this so you'll begin to recognize the difference between when your muscles are tense and when they are relaxed. The tension and anxiety that you normally experience have a large physical component. When you feel tense, or uptight, you may not be aware that your muscles are tense...you just feel uncomfortable. You'll learn that through relaxing your muscles, you can feel relaxed. Remember, you can't be both tense and relaxed at the same time. Once you've learned this method, you'll be able to do it on your own whenever you begin to feel tense. For example, you can use it to sleep at night, or when you have a headache. To give you an idea of what we'll do, I'd like you all to make a fist holding it as tight as you can. (The leader demonstrates what he or she means by making a fist, extending it out). Do it as hard as you can and notice the feelings of tension and discomfort building in your hands. (Approximately 10 seconds of tensing passes). Now relax your hand, let go. (Leader uses a soothing, quiet tone). Notice how the tension and discomfort are draining from your hand...being replaced by sensations of comfort, warmth, and pleasure. (Approxiamtely 10-15 seconds of relaxation). Notice the difference and contrast between the state of tension and that of relaxation. See how much better it feels to be relaxed."

Before going on to the complete exercise, the leader inquires as to whether any subject has any physical disability that might result in pain or further injury where the associated muscle groups tensed. In any case, the leader takes special care with those muscle groups by either telling the subject to limit the amount and suddenness of the tensing procedure, or leaving that muscle group out of the tensing procedure entirely.

"Now we're going to use this procedure with all your muscle groups. As I instruct you, please try to limit the tensing to just that muscle group, one muscle group at a time, trying not to tense other groups. It may feel natural and automatic to tense other groups along with the one you're working on, but try to make a conscious effort not to tense other muscle groups. This is the first time so just do the best you can. You'll find that relaxation gets easier with practice. Try to limit any unnecessary movements and please, no talking. Please save your questions until after the exercise. Close your eyes and begin by taking a deep breath and slowly (pause)... and then slowly letting the air out of your lungs. See how you can slow your breath down..." The leader pauses for a minute before continuing with the rest of the exercise.

"Bring your attention now to your feet. Tense the muscles in your feet by bending your feet upward toward your head. Do it as

hard as you can, noticing the feelings of tension and discomfort building in your feet. (10 seconds of tensing passes)... Relax your feet. Let go...Notice how the tension and discomfort are draining from your feet...being replaced by sensations of comfort and warmth so your feet feel relaxed and heavy (10-15 seconds of relaxing). Notice the difference between tension and the relaxed state."

The procedure is repeated with the feet stretched in the opposite direction away from the head and then relaxed. The leader employs the same exercise in the following sequence:

Calves - tensed; relaxed. For example, "Bring your attention to your calves. Focus in on tensing the muscles in your calves as best you can. Do it as hard as you can..."

Thighs - Tensed; relaxed.

Buttocks - Tensed; relaxed.

Stomach - Tensed by being pulled in as hard as possible; relaxed.

Chest - Tensed by being inflated as much as possible; relaxed.

Back - Tensed by being pressed into the mat; relaxed.

Hands - The fists are tensed; relaxed. The fingers are extended; relaxed.

Lower Arm - Area between wrist and elbow is tensed; relaxed.

Upper Arm - Biceps and triceps are tensed; relaxed.

Shoulders - The shoulders are pulled back; relaxed. The shoulders are pushed forward; relaxed.

Neck - (lateral) - With shoulders straight, the head is turned slowly to the right, but to an extreme position; relaxed. With shoulders straight, the head is turned as far as possible to the left; relaxed.

Neck - (forward) - The head is brought forward until the chin digs into chest; relaxed.

Jaw - The jaw is jutted out as far as possible; relaxed.

Mouth - The lips are pursed in the exaggerated pout; relaxed. The mouth is opened as wide as possible; relaxed.

Eyes - The eyes are closed as tightly as possible; relaxed.

Brow - The brow is furrowed deeply as in exaggerated thought; relaxed.

Following completion of the last tension-relaxation cycle, the leader brings about even deeper relaxation by an additional series of suggestions as illustrated by the following:

"Now I want to imagine, actually experience if you can, a wave of warm, comfortable, pleasant relaxation...a wave of relaxation that is going to permeate and engulf your entire body; so that when this wave of relaxation reaches a part of your body, this will be a signal to relax even further, totally relax that part of your body. Feel the wave of relaxation engulf your feet and now your calves and thighs as they are completely, totally, perfectly relaxed... and now your buttocks and midsection...warm relaxation making all the muscles loose and flaccid. Now your midsection and up your back and chest, and in your hands and arms, so that if any tension was there it is now draining away...draining away. And this wonderful wave of relaxation is now reaching your shoulders and neck and covering your face so that your mouth is completely relaxed...totally relaxed... and now your tongue and facial muscles are becoming more and more relaxed...now your eyes are being permeated by this calm, wonderful wave of relaxation and your forehead...so relaxed, so relaxed, so pleasant...so heavy.

The following is a visualization sequence which is used to bring about a deepening of the relaxation state.

"Imagine yourself now at one with this wave of relaxation and feel it carrying you, and floating you to a scene of a beach. You can feel yourself now lying on warm sand with the sun pouring down on you, warming you, relaxing you even further. Be aware of what your body feels like. Notice any sounds or smells-the sound of waves, the smell of the ocean. Spend a few minutes now on your own enjoying this wonderful state of relaxation. (Leader lets 3 - 5 minutes pass). In a little while now, you'll return to this room. As you do, you can bring back with you that pleasant calm feeling of relaxation. Prepare yourself to return and when you feel ready, open your eyes."

Leader allows subjects to lie quietly and peacefully before beginning discussion and encourages subjects to take as much time as they need before sharing their experiences.

Discussion of Experience (15 minutes). At this point, the leader questions each subject as to feelings and experiences during relaxation. The responses are generally very favorable. Most subjects report having achieved a fairly deep state of relaxation and feeling refreshed and good. Subjects may report trouble relaxing certain

muscle groups or complain of difficulty in isolating and tensing certain muscle groups. In response, the leader gives subjects positive feedback and encouragement on any level of relaxation that they did achieve in this initial session, and explains that with practice the technique will come more easily and they will be able to isolate muscle groups better and become more deeply relaxed. Some subjects may question whether or not it is acceptable to fall asleep during the exercise. The leader responds that the exercise may be used to fall asleep and that occasionally that may happen spontaneously. If the subject reports he or she felt little or no relaxation, the leader tells the subject not to be discouraged but to try it again. Subjects are informed that another form of relaxation will be taught later that may be more suitable for them. Occasionally, a subject may report an 'uneasiness' or mild anxiety after the relaxation experience. This individual may be chronically tense, and the strangeness of the new experience of relaxation is frightening. The leader reassures the subject that his or her experience is not uncommon. The leader explains that after the client becomes more used to relaxation, the feeling of uneasiness will dissipate and he or she too can learn to enjoy the relaxation experience. Sometimes a subject attributes the deep relaxation experience to the onset of his or her methadone dose. The leader does not discount this possibility, but suggests the individual try the technique at another time, for example, in the evening to see that the technique does indeed bring about deep relaxation. Encouraging feedback from other group members who have felt the experience noticeably different than methadone onset can be helpful.

The leader ends all sessions with encouraging subjects to practice the technique as best they can between now and the next meeting.

Week 2 Meeting 3

Greetings and Review (10 minutes). Subjects are greeted as they arrive, and are questioned about any progress made since the last meeting. Any questions subjects have about the last meeting, or about the use of relaxation are answered. Any use or attempted use of the relaxation technique is reinforced.

Information and Discussion - Health, Nutrition, and Detoxification 20 minutes. The following discussion focuses on the effects that nutrition and other drugs have on the detoxification process. The leader reviews the information, encouraging feedback and sharing of experiences. The leader says the following (in his or her own words):

"Today I'd like to go over some information about common substances taken into the body. These are substances most of us

normally don't think of as drugs but which can have real effects and can compound the stress your body is in while detoxifying. Sugar is one substance that can contribute to mood swings. After eating something with a high sugar concentration, like a candy bar, you may feel a rush of vitality. This 'above normal feeling' however, is temporary and one winds up bouncing below normal when the sugar effect wears out; then you may feel tired, fatigued, irritable, and hungry. This week you may want to watch your sugar intake and start to be aware of the physical effects.

Caffeine, found in coffee, chocolate, tea and cola beverages, is another common substance that has subtle effects. Caffeine can give you a feeling of energy, alertness; alleviating fatigue. However, too much can make you jittery, depressed and feeling shaky - all symptoms of anxiety. If you're having trouble sleeping at night, it may have something to do with a high caffeine intake. Caffeine is a powerful substance and even has a mild withdrawal effect as you may notice, e.g. draggy feeling in the morning alleviated by coffee.

Nicotine is a substance that has effects like "speed". It energizes and cuts appetite but as with anything that brings you up, when the effects wear off you'll feel lower and below normal. Extreme nicotine intake can also cause a variety of physical problems including jitteriness, gastric upsets, heart palpitation, nausea, and high blood pressure. Many unpleasant symptoms that may occur because of detoxification also happen when you smoke too much.

Alcohol is another commonly abused drug. The immediate effects are not too different from other downers. You may feel more relaxed, confident and powerful with your inhibitions lessened. However, afterward there are negative physical effects such as fatigue and nausea. Emotional problems such as depression are also common.

In addition to using common, legal drugs moderately, other basic components of good health include getting enough sleep and getting exercise.

The leader then begins a discussion of specific detoxification strategies, asking subjects to share their past experiences of detoxification. Most subjects have had detoxification experiences and feel comfortable sharing and exchanging information about them. The leader emphasizes the importance of gradual detoxification as proven by relevant research (Senay, Dorus, Goldberg and Thornton, 1976). He or she then provides each individual with a schedule for a 3% per week dose reduction based on the subject's current dose. (This schedule is prepared for all participants prior to the meeting and is essentially a 30 week detoxification schedule). Subjects are told that this schedule has been a useful one for many

clients and that they may want to adapt it. It is explained that differences between individuals make it impossible to insure that any one schedule is optimal for everyone but that this particular rate of detoxifying has been a good one 'on the average'. However, subjects are assured that they are under no obligation to detoxify according to this schedule. Leader stresses that whatever schedule they choose, the important factor is that it be gradual, minimizing stress on the body and maximizing the potential for success.

Progressive Muscle Relaxation (50 minutes). The leader takes subjects through a complete muscle relaxation experience as described in Meeting 1, and encourages a brief discussion of the experience afterwards.

Brief Introduction to Cognitive Relaxation (10 minutes). At this point, the leader introduces the second relaxation technique: Cognitive relaxation. The following instructions, adapted from Benson (1975) and Beary and Benson (1974) are used:

The subject is instructed to sit quietly in a comfortable position, and close his or her eyes. He or she is also instructed to focus attention on his or her breath, inhaling and exhaling deeply and slowly. Subjects repeat the sequence several times, concentrating on slowing the breath down. The subject is then instructed to deeply relax all muscles, beginning at the feet and progressing up to the face; as the subject breathes out, he or she says the word "calm" silently. The subject is instructed to proceed at his or her own rate letting a rhythm evolve of breathing IN...OUT, repeating "CALM" silently to oneself. The subject is told not to worry about whether he or she is succeeding in achieving a deep level of relaxation, and is instructed to maintain a passive attitude and let relaxation occur on its own. If distracting thoughts do occur, the subject is instructed not to dwell on them, but to continue to repeat "calm" as soon as he or she becomes aware of them. Subject then continues to relax until told to stop (between 15 to 20 minutes). When finished, the subject is told to sit quietly for awhile, at first with eyes closed and when ready, to open eyes. The leader limits this initial procedure to approximately 10 minutes.

Discussion of Experience and Closure (10 minutes). Leader asks each subject about his or her experience and how it compares with the other relaxation technique. Many subjects prefer the cognitive relaxation over the other, particularly in terms of day to day use. The technique is advantageous in that it is easy to learn and can be done anywhere without preparation. Some subjects report difficulty concentrating and feeling too preoccupied with other worries. The leader explains that the experience will vary with their state of mind, but that with continued practice, the relaxed state will come more easily and naturally. The leader encourages practice, emphasizing that setting aside a specific time daily is

most beneficial.

Week 2 Meeting 4

Greetings and Discussion of Practice (10 minutes). The leader begins the session greeting members and inquiring about practice and use of the relaxation techniques. Most students report using it best in the evening if they can't sleep or when anxious. Some combine techniques in an individual manner using what they like best from both. Leaders reassure subjects that the techniques were meant to be used for their own individual needs. Some subjects report using it successfully to get to sleep, instead of taking drugs such as Librium, Valium or Codeine. Use has also been reported after upsetting situations commonly involving the expression of anger. Leaders should be sure to praise any subject's use of the technique, complementing the subject's growing ability to learn relaxation skills. Leader also encourages discussion about lack of use or difficulties encountered in practice. The most common problem is no finding time to practice. The leader may respond to this with exploring the problem in greater detail and making suggestions to overcome difficulties (e.g. practicing while riding on a bus, in a waiting room, before sleeping, etc.).

Information Presentation (20 minutes). Leaders read the following information to subjects, which is also printed in booklet form and given to them at the end of the session. The leader expands on concepts and makes sure content is understood. Feedback and reactions to content is encouraged.

"Tapering Off and Feeling Good:
An Introduction"[1]

This booklet is about how Relaxation Training can help you deal with the changes you go through when you lower your methadone dose.

Methadone is a powerful pain killer. If you are used to having a certain amount of it in your system, you will feel different if you lower that amount. The quicker you lower it the more you will notice the changes.

Not all the changes are unpleasant. Many people notice that they have more energy, their senses are sharper, and they can think

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[1] In Bay Area methadone maintenance clinics, "detoxification" can be a highly anxiety-provoking word. Subjects understand it to mean a clinic-imposed, rapid schedule. In our handouts and discussions with subjects, we use the term "tapering" to refer to voluntary, slow dose reduction.

more clearly.

Also, tapering from methadone is not always difficult. Many people have lowered their doses, sometimes by large amounts, and have experienced no problems.

Dose Changes and Anxiety

Most people who are tapering or thinking about lowering their dose are worried about what will happen. They may be anxious about being without enough of a drug they know they are addicted to or anxious about the discomfort they expect to feel. Anxiety produces many strange symptoms: irritability, sweating, nausea, fatigue, sleeplessness, are just a few of the symptoms associated with anxiety. Lowering your dose may result in many symptoms or types of discomfort, but it is impossible to know how much these discomforts are due to a lower dose. There also is a possibility of a "self-fulfilling prophecy" - worrying about having problems is what makes problems happen. The more pain you expect to feel, the more pain you will feel.

What is Withdrawal?

In many ways we really don't know. We do know people feel uncomfortable when they taper, and we know much of their discomfort is a "head trip", and many things contribute to it. Because methadone is a strong pain killer, reducing your dose should result in some feelings and sensations returning or becoming stronger. You may mistake normal sensations as symptoms of withdrawal.

After they have stopped using a drug, people often feel a craving for it. Is this an entirely physical thing? We really don't know. We do know, however, such cravings are closely related to psychological factors - i.e. people report feeling cravings when tense, or only in situations where they used before. Such things indicate to us that feelings and experiences are much involved in cravings; they are not just physical symptoms alone.

As we said earlier, the main problem that most people who are tapering have is tension, edginess, or anxiety. Often this is experienced as problems sleeping at night or being short-tempered. This anxiety creates other problems and makes other symptoms worse, such as aches and pains.

If you are tapering off an addictive drug, your body is going through some changes because it is not getting as much of a drug that it has become dependent on. It is used to functioning in an abnormal state, now it must become used to functioning in a normal state. Going through changes causes stress and provokes the anxiety response. Any unexpected change or one that is expected but believed to be threatening will cause the speeding up of bodily processes. Stress

produces or intensifies physical reactions such as aches and pains and other anxiety reactions.

Again, anxiety or stress increases the activity of the nervous system. This can produce a variety of symptoms including nausea, vomiting, loss of appetite, diarrhea, "the shakes", sniffing, sweating, clammy hands and feet, and hot and cold flashes. There may be complaints of being tense, nervous, jumpy or on edge, sleeplessness, bad dreams, depression, or paranoia. All of these reactions are a result of the stress reaction, or the anxiety response. You can see that they are what are usually called "withdrawal symptoms".

The Relaxation Response

Scientists have recently studied what they call the "Relaxation Response". This is the response produced by Relaxation Training. It is a way of slowing down your nervous system. Your nervous system is the way your brain and body communicate to each other. This system has two states. One is the normal relaxed state and the other is an alarm or crisis state. When you take away a drug which your body is dependent on, the alarm bell goes off. This affects both your physical and emotional state and provokes the alarm response. The Relaxation Response, on the other hand, reduces the activity of the nervous system. This reduces anxiety and eases the discomfort of tapering. With Relaxation Training you can learn to produce this response.

If your alarm bell is going off because you are tapering, you can use Relaxation Training to get to those nervous system centers to calm things down again. Learning to use the Relaxation Response is a way of helping you make changes more easily. Because it is impossible to be both anxious and relaxed at the same time, the more you can learn to turn on the Relaxation Response, the less intense your reaction will be to a lower dose.

Relaxation Training

Because anxiety is a big problem in tapering, it is important to have ways of dealing with anxiety, other than drugs. When you are anxious, your muscles are tense. Tension increases pain. Reducing tension reduces pain. Relaxation Training is very simple to do and involves such things as tensing and relaxing all the muscles and using deep breathing exercises. By doing these every day for a period of time, most people can learn to relax themselves more deeply than they have been able to before, and they can do it whenever they want to. It is also possible to learn new ways to handle problem situations. Learning to recognize anxiety and practicing relaxation when anxious is another way to reduce anxiety about them.

Relaxation Training can be very helpful for people who are anxious as a result of lowering their methadone dose. It can be

used at any time a person feels tense or worried, no matter what the reason. For instance, many people use it to get to sleep when they are restless or to get their minds off problems during the day.

A Plan

When you start to taper, it's best to have a plan for lowering your dose. People start to taper for many reasons, but those reasons may change. If you are always making a spur-of-the-moment decision about your dose, you may never decide to taper. Without a plan your progress towards your goal will always be determined by what happens each day instead of being determined by your progress up to that day. We have given you a schedule many methadone clients have found useful.

Having a plan doesn't mean you should stick to it no matter what happens. You may want to change your mind about how fast or how much you want to lower your dose because you have learned some things along the way. But thinking about it ahead of time is important, and committing yourself to try it is important.

Progressive Muscle Relaxation and Discussion of Experience (40 minutes).

Leader goes through the Jacobson muscle relaxation as outlined in Meeting 1. The experience is briefly discussed. Subjects will often report reaching deeper levels of relaxation. The leader notes this is due to more practice.

Cognitive Relaxation (20 minutes)

Leader goes over the Benson cognitive relaxation technique as described in Meeting 3, extending period of practice to 15 minutes. This is followed by a brief discussion period and closure of session.

Week 2 Meeting 5

Greetings (20 minutes). Subjects are greeted as they arrive and questioned about any progress in use of the techniques. Leader answers any questions or concerns about practicing.

Jacobson Muscle Relaxation and Discussion (40 minutes). Leader follows procedure as outlined in Meeting 1.

Benson Relaxation and Discussion and Closure: (30 minutes). Leader follows Benson procedure as outlined in Meeting 3.

Week 3 Meeting 6

Greetings and Review (10 minutes). As in other meetings, the group begins with a discussion of practice. The leader encourages any attempts at practice, reinforcing such attempts with positive feedback.

Progressive Muscle Relaxation (30 minutes). In this session, subjects are instructed to experience the Jacobsen Progressive Relaxation in comfortable sitting positions rather than lying on mats. The complete relaxation sequence is followed as outlined in Meeting 1. After the exercise the leader asks each subject about his or her experience of relaxation. By this time, most individuals will readily adjust to sitting up and achieving the same deep level of relaxation.

Discussion - Awareness of Anxiety (30 minutes). As a part of learning to use relaxation as an active coping skill, subjects are taught to use anxiety as a cue to relax. Subjective cues associated with anxiety are discussed. Subjects learn to identify those ways in which they personally experience anxiety. In this discussion, the goal is to increase the subject's awareness of anxiety-arousing situations and the physical symptoms that accompany this experience. The leader points out the similarity of these symptoms to withdrawal symptoms.

The leader encourages discussion of the kinds of situations that make subjects "uptight" and what symptoms they may experience. Detoxification experiences are among those shared and compared. If they have not been mentioned, leader alerts subjects to the following feelings and behaviors which commonly signal anxiety: tense muscles, heart flutters, twitching, scratching and other goalless movements, feelings of dread, uneasiness, repetitive thoughts, sweating and headaches. Leader encourages viewing somatic symptoms occuring during detoxification as often unpleasant but natural reactions to dose reduction. The role of anxiety in exacerbating symptoms during detoxification is explained. The ultimate controllability of symptoms is emphasized particularly via anxiety reduction techniques. The importance of recognizing symptoms of anxiety is emphasized. Subjects are encouraged to notice when they feel anxious and uncomfortable in the next few days and what kind of symptoms accompany those situations.

Cognitive Relaxation (20 minutes). Benson relaxation is practiced for approximately 15 minutes, as outlined in Meeting 3. The experience is briefly discussed. Leader ends meeting with a reminder to practice.

Week 3 Meeting 7

Greetings and Review of Practice (10 minutes). Leader initiates discussion of practice of relaxation techniques.

Discussion of Anxiety-Arousing Situations and Symptoms (35 minutes). Subjects are asked if they were aware of any times since the last meeting when they felt tense, uptight or anxious. When examples are given, the subject is questioned about what cues or physical symptoms he or she recognizes as accompanying the experience. Subjects are given 4 x 6" index cards and asked to write down situations or scenes they can think of in which they become anxious. Most subjects do not have difficulty with this task. However, the leader helps the subjects define the situation as specifically as possible. For example, the subject may say "My mother makes me anxious." Through discussion with the leader this becomes "Fighting with my mother about paying the bills makes me anxious." Suggestions of common anxiety situations usually provoke discussion and further examples. Most subjects list situations that involve fighting, arguing, or coping with significant others. Also frequently mentioned are money problems and driving (frustration in traffic, running out of gas, being a passenger). Job-related stresses are also common (applying for a job, customers being difficult, not getting along with supervisor). Female subjects often mention situations that require assertive behavior.

Other concerns are the use of drugs (friends or mates talking about or using drugs) and the issue of detoxifying (missing a dose, thinking about detoxifying, not being successful at detoxification). For example, one woman could pinpoint her anxiety to the situation of approaching the dispensing window in the clinic and telling the nurse that she would like to lower her dose. In another case, a pregnant woman said that her primary source of anxiety was worrying about whether her baby would be born abnormal because she was on methadone.

Some subjects have difficulty being specific; specificity can be increased by the leader and subject carefully discussing, narrowing, and pinpointing the anxiety producing situation. Others want to be too detailed and insist on writing at great length to explain themselves. The leader can help pinpoint which component or behavior is the most anxiety-arousing. Others insist that they never become anxious and are unable to describe any scene. The leader may suggest some non-threatening and common anxiety-arousing situations or ask the subject to recall such situations in the past.

After these scenes have been discussed and developed, the leader asks subjects to turn their cards over and list the symptoms or physical feelings that they experience in these situations. Most subjects can easily identify some of the cues that tell them they are anxious. Most common are headaches, stomach problems, (aches, cramps, vomiting, heartburn), muscle tension (usually in the neck or shoulders), sweating, crying, or yelling, shouting or talking fast. Also mentioned are loss of appetite, inability to sleep, hot flashes, irregular breathing, heart flutters, cold hands or feet, dry mouth, smoking more, anger and confusion. In later discussion, subjects often recognize additional nervous movements that indicate tension

such as jiggling legs, cracking knuckles, grinding teeth.

The leader reviews the symptoms that accompany anxiety, pointing out similarities between people as well as individual differences. The leader also asks subjects to notice any increase of discomfort or anxiety as the situations and symptoms are discussed. Some subjects have difficulty specifying symptoms and may only be able to say they feel "tense all over". The leader asks the subjects to visualize one of their scenes and to check out their bodies as they do so. This usually helps the subjects to identify a few more symptoms.

The leader ends this discussion by asking subjects to notice anxiety-arousing situations and symptoms between this and the next meeting.

Muscle Relaxation (25 minutes). Leader goes through a briefer version of Jacobson Muscle Relaxation with clients once again in a sitting up position. In this version, tensing of muscles is left out, with only progressive relaxation of muscle groups instituted by the leader. For instance, the leader begins with the feet and says, "Relax your feet. Notice any tension or discomfort draining from your feet...being replaced by sensations of calm, warm, relaxation. With each breath, you feel your feet getting heavier and warmer, more and more calm and relaxed." (Pause for 10 seconds). And so, onward through the other muscle groups, in the following order: calves, thighs, buttocks, stomach, chest, back, hands, arms, neck, jaw, mouth, eyes, and brow.

Benson Cognitive Relaxation (20 minutes). Benson relaxation is practiced for approximately 15 minutes. After the experience is briefly discussed, the leader ends the meeting with a reminder to practice.

Week 3 Meeting 8

Greetings and Discussion of Practice (10 minutes). As before, practice is discussed and reinforced.

Discussion of Anxiety vs. Relaxation (30 minutes). Subjects are questioned about their awareness of tension or anxiety and accompanying symptoms since last meeting. Additional situations or symptoms are added to the 4 x 6 cards. The leader stresses the importance of

noticing cues of anxiety arousal as soon as they arise. The leader suggests that relaxation can be used to produce a generally more comfortable state when the subject begins to feel anxious, and that anxiety can be reduced by reinstating the relaxation response. The leader asks the subjects to check their own muscles for any tension following the present discussion of anxiety.

Jacobson Relaxation Exercise (30 minutes). Leader follows instructions as in Meeting 7 using the brief version of progressive muscle relaxation with subjects in sitting up position.

Benson Cognitive Relaxation and Closure (20 minutes). Leader follows Benson instructions as outlined in Meeting 3.

Week 4 Meeting 9

Greetings and Review (10 minutes). As before, practice is discussed and reinforced.

Practice Cycle of Anxiety Elicitation and Relaxation (45 minutes). Lists of anxiety producing situations and symptoms that were collected at the previous meeting are given out. Leader asks about subjects' monitoring of anxiety-producing situations, and answers any questions or concerns subjects may have. The leader explains that the purpose of the following exercise is to teach subjects to become aware of the cues associated with anxiety and to learn to follow these cues with the relaxation response. Two trials are held. First, subjects are instructed to imagine an anxiety-producing scene on their list while focusing on the feelings and sensations signaling anxiety. Two minutes is allowed for this procedure. Then the leader instructs subjects to follow that scene with repetition of the word "calm", deep breathing and induction of the relaxed state through the cognitive relaxation technique. Relaxation practice continues for 5 minutes followed by a break for discussion. Leader answers any questions or concerns and reassures subjects that this will become easier with practice. Another trial is held with subjects instructed to use a different scene, followed by discussion. Subjects are encouraged to use as many different scenes as possible in the subsequent trials. The goal of the procedure is to enable subjects to produce relaxation in the presence of their own particular constellation of anxiety cues, rather than in the presence of a particular scene.

The leader says the following in her or his own words:

"Choose a situation from your list, not the most anxiety-provoking, but one you can imagine clearly. (Leader may suggest a scene for each subject from his or her list). Now close your eyes and imagine yourself in that situation. Notice everything about it--the place and people,

what happens, what you and others are doing, what sounds you hear, what you say. Notice what happens to you and your body, which muscles tense up, how you can tell you are anxious. Keep visualizing that scene, noticing everything that happens, what you feel... (leader pauses for 2 minutes). And now... (the following instructions are given in a soothing tone and at a slow pace)...relax, let go, breathe deeply and slowly, slowing your breathing down and repeating the word 'calm' to yourself as you exhale. If your muscles are tight, if you are holding onto any tension, tell those muscles to relax. Keep breathing slowly and deeply, saying 'calm', and feel relaxation coming over you." (Leader allows 5 minutes for relaxation).

In discussion, subject may notice additional aspects of their anxiety-arousing situation or additional symptoms. Most subjects are able to experience anxiety and then the induction of the relaxed state. The leader emphasizes subjects' ability to do this in the "real world", making suggestions about how to do this in specific situations. For example, for someone who becomes very tense while driving, the leader may suggest taking some deep breaths while sitting at a stoplight.

On the second trial, the leader helps subjects to choose another scene which they can imagine clearly and the procedure is repeated. As these trials proceed, awareness of additional situations or symptoms often increase and discussion provokes further suggestions for managing anxiety and inducing relaxation in the actual situation.

Cognitive Relaxation (20 minutes). The leader instructs subjects in the practice of cognitive relaxation as outlined in Meeting 3.

Discussion (15 minutes). The leader summarizes the content of the meeting. He or she emphasizes the importance of using these techniques in the natural environment in order for them to be effective anxiety reduction modalities. Leader focuses discussion on the detoxification process, encouraging subjects to share their experiences of detoxifying and reiterating how the relaxation response may be useful in that process.

Week 4 Meetings 10 and 11, Week 5 Meeting 12

The plan for each of these meetings follows much the same format as in Meeting 9. The leader encourages subjects to use as many different scenes as possible in the practice cycles of anxiety elicitation followed by relaxation. The leader may vary the practice of either cognitive relaxation or deep muscle relaxation depending on the needs and requests of the group members.

The leader stresses the importance of practicing this set of skills as much as practice is required in learning any new skill (swimming, running, etc.). Discussion in these meetings focuses on elaborating on cues signalling anxiety and practical ways to use relaxation as an active coping skill.

Week 5 Meeting 13

Greetings and Review (10 minutes). As before, practice is discussed and reinforced.

Anxiety Elicitation and Relaxation Sequence (45 minutes). The procedure is followed as outlined in Meeting 9.

Relaxation Practice (20 minutes). Depending upon requests of group members, either cognitive relaxation or brief Jacobson muscle relaxation is practiced.

Discussion of Dose/Life Changes (20 minutes). The leader assists the subjects in verbalizing any changes they have made in their lives since the beginning of the treatment sessions; he or she uses this opportunity to assess each subjects' successful use of the techniques and is supportive of subjects who have had less success. Leader encourages subjects to continue their attempts to use the techniques. Subjects are also asked to compare their current dose with that which would be expected by the schedule originally designed for them. If actual dose deviates from this schedule, reasons for these deviations are discussed. Subjects who follow the schedule are reinforced. The leader is supportive of subjects who chose lower rates than projected, encouraging them to proceed at a pace they feel appropriate. Subjects who lower their dose more rapidly than planned should also be reinforced, but also cautioned not to move so rapidly that detoxification becomes uncomfortable.

Our subjects have discussed a wide variety of experiences with detoxifying and many have readily agreed that most of the problems in detoxification are a "head trip". Many subjects have lowered their doses very rapidly with little or no discomfort or know of others who have. Those who do detoxify often find that physical symptoms become a problem when they get down to doses of about 20 or 15 mg. of methadone. The leader encourages these subjects to stabilize at these low doses for a longer period of time and lower their dose by small amounts (1 mg.) when they feel ready.

Week 5 Meeting 14, Week 6 Meeting 15

Greetings and Discussion of Practice (10 minutes). As before, practice is discussed and reinforced.

Anxiety Elicitation and Relaxation Sequence (30 minutes). One trial of anxiety elicitation followed by induction of relaxation is held, as outlined in Meeting 9.

Relaxation Practice (30 minutes). As before, either Benson or Jacobson relaxation is practiced.

Discussion (20 minutes). Leader focuses discussion of dose/life changes as in Meeting 13. The meeting ends with a reminder to practice.

Week 8 Meeting 16, Week 10 Meeting 17, Week 12 Meeting 18 The following is the general format for a series of 3 bi-weekly follow-up meetings. Proportion of time spent in each activity is more variable during the follow-up sessions of the treatment, changing in regard to the subjects' needs.

Greetings and Discussion of Practice (15 minutes). The leader greets subjects as they arrive and inquires as to continued use of the technique. Any questions concerning practice of the relaxation response are answered.

Discussion of Anxiety Arousal and Dose Changes (30 minutes) Discussion focuses on anxiety-arousing situations and accompanying symptoms occuring over the past two weeks. Subjects are questioned about the use and practice of the relaxation response in these or other situations. Recent dose changes, bodily changes while detoxifying and recent decisions about dose changes are shared within the group. The leader responds to questions and comments dealing with dose changes and their relation to stress and anxiety. Life changes and goals related to detoxification are discussed.

Relaxation Review (35 minutes). Progressive Muscle Relaxation is practiced for 20 minutes as outlined in Meeting 7. In this version, the exercise is done sitting up with no tension of muscles instituted, only progressive relaxation of each muscle group. This is followed by a brief practice session of Benson relaxation as outlined in Meeting 3.

Discussion (10 minutes). The relaxation experiences are discussed. The leader stresses the importance of continued practice. In Meetings 16 and 17, the leader informs subjects of the next meeting time in 2 weeks.

In the final meeting, the leader praises subjects for having completed the treatment plan. Subjects are encouraged to continue on their own using the skills acquired in relaxation training to achieve their individual goals.

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